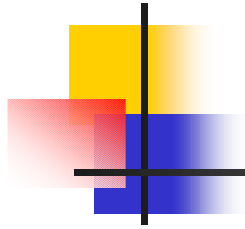
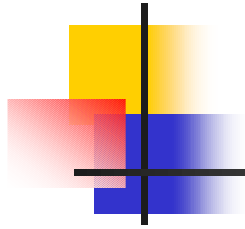


What happens
if the power
goes out this summer
- Regulatory
and practical issue



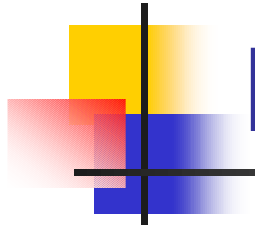
Introduction

- Possibility of Black Outs in Maricopa County
- Air quality issues associated with this power shortage



Topics of Discussion

- Issues associated with permitting of new power plants in the State
- Planning for Emergency Power Generation facilities



Power Plant Permits

- Existing Permitted Capacity 9000 MW excluding Hydro and Nuclear
- New Capacity under permitting and construction 19000 MW
- 1500 MW new capacity will be available this summer.



List of Existing Power Plants (9134 MW)

Name	Capacity
AEPCO	523 MW
APS Cholla	995 MW
APS Fairview	20 MW
APS Ocotillo	330 MW
APS Saguaro	200 MW
APS W. Phoenix	469 MW
APS Yucca	280 MW
Citizen Utilities	55 MW
SRP Agua Fria	687 MW



List of Existing Power Plants

Name	Capacity
SRP Coronado	912 MW
SRP Cross Cut	413 MW
SRP Kyrene	380 MW
SRP Navajo	2250 MW
SRP Santan	360 MW
TEP DeMoss Petrie	24 MW
TEP Irvington	422 MW
TEP Springerville	760 MW
Yuma Cogen	55 MW



List of New Power Plants (18810 MW)

NAME	MW
Allegheny La Paz Generating Station	1080
American Energy	600
APS West Phoenix Expansion	660
AEPCO Expansion	40
Caithness Big Sandy Energy Project	725
Calpine South Point	640
Duke Energy Arlington Valley Plant	1180



List of New Power Plants

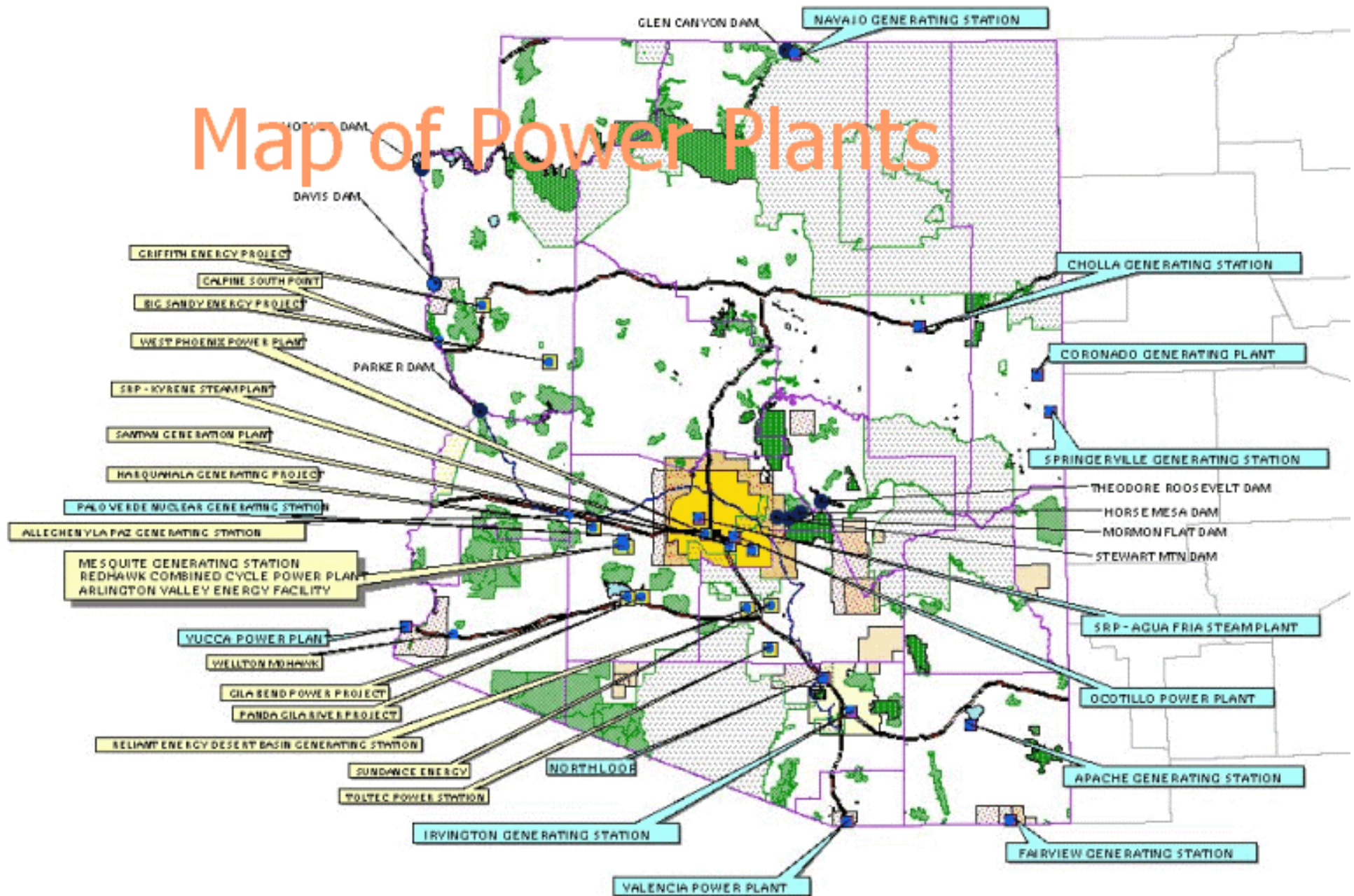
NAME	MW
Griffith Energy	640
Panda Energy	2300
PG & E Harquahala	1060
Pinnacle West Red Hawk	2120
Power Technology Gila Bend	845
Reliant Energy –Desert Basin	520
Sempra Mesquite Power	1300



List of New Power Plants

NAME	MW
Toltec	2000
San Tan Expansion	825
Kyrene Expansion	275
Sundance Energy	600
TEP Springerville Expansion	800
Wellton Mohawk	520
APS Red Rock expansion	80

Map of Power Plants





Power Plant Permits

- Cumulative Air quality Impact
- Ozone 1 hour max Concentration
- Study Results
 - Greatest increase in any cell – 0.7 ppb from 92 ppb



Planning for Emergency Generators

- Large numbers of facilities have Emergency Generator
- Current Permit prescribe limitations on operation
- Need to modify permits if expected operation beyond permit requirements
- Get General Permit if you qualify



Generator General Permit

- General Permit concepts
- Who Can get General Permit
- What is required by General Permit
- Process for obtaining General Permit



Generator General Permit

Who Can get General Permit

- Stand alone generator
- Combined capacity < 3000 HP
- Total Hours of operation within range 500 –3000 hrs/yr for diesel
- Exhaust stack must be:
 - 14 ft above ground
 - Vertical
 - Only hinged caps



Generator General Permit

Who needs to get General Permit
(Maricopa County)

- Need permit only if
 - Diesel fuel > 185 HP
 - Gasoline fuel > 45 HP
 - Natural Gas/LPG > 225 HP



Generator General Permit

Who needs to get General Permit (Pinal County)

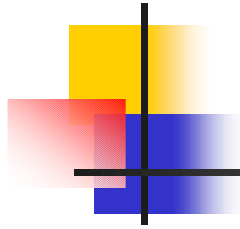
- Diesel fuel > 7 hp
- Natural Gas > 10 hp
- Gasoline - All



Generator General Permit

Who needs to get General Permit
(outside Maricopa and Pinal County)

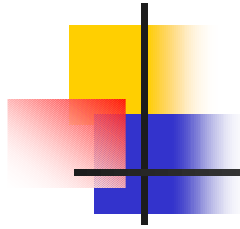
- A permit is required if combined capacity is greater than 325 hp



Generator General Permit

Application Process

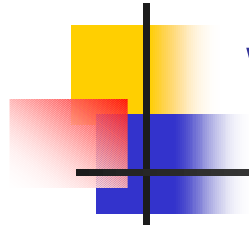
- Applicability analysis
- Obtain application forms and calculate allowable hours of operation
- Prepare application forms
- Compliance certification
- Supplemental attachment for Maricopa, Pima and Pinal Counties
- Apply to appropriate agency



Generator General Permit

What is required by General Permit

- Operating Hours limitations.
- Fuel Limitation
- Fuel Supplier certification for sulfur
- Emission limitations
- Record keeping requirements
- Quarterly Opacity checks



What This Means

- Protection of Environment.
- Timely and flexible permits.
- Apply for permit ASAP. Don't wait for last minute.



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